**CORE REQUIREMENTS**

<table>
<thead>
<tr>
<th>SEMESTER</th>
<th>REQUIREMENT</th>
<th>Course Options</th>
<th>Cred</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR Year</td>
<td></td>
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<tr>
<td></td>
<td>Leader-Servant</td>
<td>SER 103</td>
<td>1</td>
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<tr>
<td></td>
<td>Fresh. Writing</td>
<td>ENG 120</td>
<td>3</td>
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<td></td>
<td>Philosophy</td>
<td>LIB 110, PHI 210, or PHI 215</td>
<td>3</td>
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<td></td>
<td>Am. Republic</td>
<td>LIB 120, HIS 120, or HIS 220</td>
<td>3</td>
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<td>Literature</td>
<td>LIB 130, ENG 210, or ENG 215</td>
<td>3</td>
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<td>Hist. of the Arts</td>
<td>ART 210, ART 215, HUM 210, HUM 215, MUS 210, or THE 215</td>
<td>3</td>
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<td></td>
<td>Political Heritage</td>
<td>HIS 210, HIS 215, or POL 213</td>
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<tr>
<td></td>
<td>1st Yr For. Lang.</td>
<td>A language 101 and 102 or comp. exam</td>
<td>0-6</td>
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<td></td>
<td>Mathematics</td>
<td>MAT 114, 115, 206, 221, 241, 242, CSC 213, or PHI 223</td>
<td>3-4</td>
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<td></td>
<td>Life Science</td>
<td>BIO 114, 126, 128, 201, 211, 212, or 228</td>
<td>3-4</td>
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<td></td>
<td>Physical Science</td>
<td>CHE 114, 201, PHY 114, 117, 126, or 201</td>
<td>3-4</td>
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<td>One of the above life or physical science courses must have a <strong>LAB</strong> component</td>
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<td><strong>Physical Activity</strong> or <strong>Health &amp; Wellness</strong></td>
<td><strong>A Phys. Activity course from PER 100-199 or, 231, 232, or 259R. PER 143 must be taken once.</strong></td>
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<td><strong>Physical Activity</strong> or <strong>Health &amp; Wellness</strong></td>
<td><strong>A Phys. Activity course from PER 100-199 or, 231, 232, or 259R. PER 143 must be taken once.</strong></td>
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<td><strong>Info. Literacy</strong></td>
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<td>Social Sciences</td>
<td>ECN 210, 215, EDU 250, FCD 210, 250, POL 223, 233, PSY 201</td>
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<td>2nd Yr. For.Lang.</td>
<td>A language 201 &amp; 202 or comp. exam</td>
<td>0-6</td>
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<td><strong>Physical Activity</strong> or <strong>Health &amp; Wellness</strong></td>
<td><strong>A Phys. Activity course from PER 100-199 or, 231, 232, or 259R. PER 143 must be taken once.</strong></td>
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<tr>
<td>SR Year</td>
<td>Senior Seminar</td>
<td>LIB 490</td>
<td>2</td>
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<td>Adv. Writing</td>
<td>Paper Title:</td>
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**MAJOR REQUIREMENTS**

**Core electives:**

- **CSC 213 Programming Fundamentals**
- **CSC 313 Software Engineering**
- **CSC 324 Data Structures**
- **CSC 326 Computer Organization**
- **CSC 326 Theory of Computation**
- **CSC 498 Senior Capstone**

**Electives I:** 9 hours from CSC 316, 327, 443, 447, 453 and 457

**Electives II:** 6 hours from CSC 223, 224, 323, 375R, 385R, 399, 411, 221, 341, 343, 343, 344, 345 or PHI 223

**Other Courses Toward Graduation:**

- Required: 120 credit hours
BACHELOR OF ARTS
GRADUATION REQUIREMENTS

The student must do the following to receive a Bachelor of Arts degree:

1. Complete a minimum of 120 credit hours of study, at least 60 of which or at least the last 30 credits before graduation are at Southern Virginia. No more than 9 credit hours will be granted for internship courses.
2. Complete all requirements of the Southern Virginia Core.
3. Complete all requirements of at least one major.
4. Earn a minimum grade point average of 2.00 on all course work taken at the university.
5. Comply with all university standards, regulations, and procedures, from the date of matriculation through the date of final graduation.

SOURCE: HTTP://SVU.EDU/ACADEMICS/CATALOG/GRADUATION-REQUIREMENTS.ASPX

| COMPUTER SCIENCE |
| MAJOR REQUIREMENTS |
| (32 credit hours) |

Computer science is the systematic study of computational systems and computability. It includes theories for understanding the analysis, design, implementation, validation and verification of solutions to complex problems, and for the elicitation, representation, manipulation and visualization of knowledge. More simply put, computer scientists learn to understand what a computer can and cannot do, how computers can efficiently perform specific tasks, how computers can store and retrieve specific types of information, how computers can most effectively organize and display information, and how computers can appear to behave intelligently. Building on the core ideas of a liberal education, the computer science major combines theory with practical experiences to develop skills in problem solving, programming, communication, and collaboration in order to help students realize their potential to assume leadership roles in an increasingly technical world. Computer science majors can prepare for careers in research, development and teaching by pursuing graduate degrees, or they can apply their skills in virtually any industry, from business to biochemistry, and from education to entertainment.

Program coordinator: Dr. Alan Whitehurst

Major Core (17 credit hours):
- CSC 213 Programming Fundamentals (GE) (3)
- CSC 313 Software Engineering (3)
- CSC 324 Data Structures (3)
- CSC 326 Computer Organization (3)
- CSC 336 Theory of Computation (3)
- CSC 498 Senior Capstone (2)

Major Electives I: 9 credit hours from among the following:
- CSC 316 Database Systems (3)
- CSC 327 Algorithms (3)
- CSC 443 Operating Systems (3)
- CSC 447 Programming Languages (3)
- CSC 453 Networking (3)
- CSC 457 Artificial Intelligence (3)

Major Electives II: 6 credit hours from among the following:
- CSC 223 Authoring for the Web (3)
- CSC 224 Dynamic Web Development (3)
- CSC 313 Software Engineering (3)
- CSC 316 Database Systems (3)
- CSC 323 Advanced Authoring for the Web (3)
- CSC 324 Data Structures (3)
- CSC 327 Algorithms (3)
- CSC 375R Topics in Computer Science (3)
- CSC 385R Directed Study in Computer Science (3)
- CSC 499 Senior Internship/Practicum (1)
- MAT 114 Finite Mathematics (3)
- MAT 221 Statistics (GE) (3)
- MAT 241 Calculus I (GE) (4)
- MAT 242 Calculus II (GE) (3)
- MAT 341 Calculus III (3)
- PHI 223 Introduction to Logic (3)

Minor Requirements (18 credit hours)

Minor Core (9 credit hours):
- CSC 213 Programming Fundamentals (GE) (3)
- CSC 326 Computer Organization (3)
- CSC 336 Theory of Computation (3)

Minor Electives: 9 credit hours from among the following:
- CSC 223 Authoring for the Web (3)
- CSC 224 Dynamic Web Development (3)
- CSC 313 Software Engineering (3)
- CSC 316 Database Systems (3)
- CSC 323 Advanced Authoring for the Web (3)
- CSC 324 Data Structures (3)
- CSC 327 Algorithms (3)
- CSC 375R Topics in Computer Science (3)
- CSC 385R Directed Study in Computer Science (3)
- CSC 443 Operating Systems (3)
- CSC 447 Programming Languages (3)
- CSC 453 Networking (3)
- CSC 457 Artificial Intelligence (3)
- MAT 114 Finite Mathematics (3)
- MAT 221 Statistics (GE) (3)
- MAT 341 Calculus III (3)
- PHI 223 Introduction to Logic (3)

SOURCE: HTTP://SVU.EDU/ACADEMICS/CATALOG/COMPUTER-SCIENCE